

FIELD ENGINEERING BULLETIN

MODEL ADO
BULLETIN NO. 61108 SHEET 1 OF 6
DATE 5/86 BK-8606-08

INTERPOLATOR ROUND OFF ERROR IMPROVEMENTS

7-15-86

*Completed
DWJ*

I. APPLICABILITY

All 2000/3000 ADO'S equipped with PWA Part Number 1420026.

II. PURPOSE

To prevent digital noise caused by rounding errors on the Coefficient Store PWA. This noise is made visible if the border is used with certain Luma border values.

III. DISCUSSION

A small modification is made on the Coefficient Store PWA which improves the rounding error correction on the FIR filter. This change greatly improves the video performance out of the ADO. The change affects both H - V PWA's.

As stated above this effect is not very visible unless a border is used. It normally shows up as horizontal and vertical lines going through the picture and background. The magnitude of the noise (lines) changes with the border Luma levels and also the picture size.

IV. PARTS REQUIRED

Parts required for this update may be purchased through Ampex. Installation assistance can be obtained through your local Ampex Regional Office at current Ampex Field Engineering rates.

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INTERPOLATOR ROUND OFF ERROR IMPROVEMENTS

V. PROCEDURE:

1. Power down the ADO chassis and remove both Coefficient Stores PWA's from the Digital Chassis.
2. Locate IC 4C on the Coefficient Store and lift Pins 2 and 6 from the socket. Do the same on both PWA's. (See Figure 1 for more details).
3. Add a wire and connect the lifted Pins to the 5V Power Rail (as shown in Figure 1).
4. Restore both PWA's to the Digital Chassis.

WAS (P. 16)

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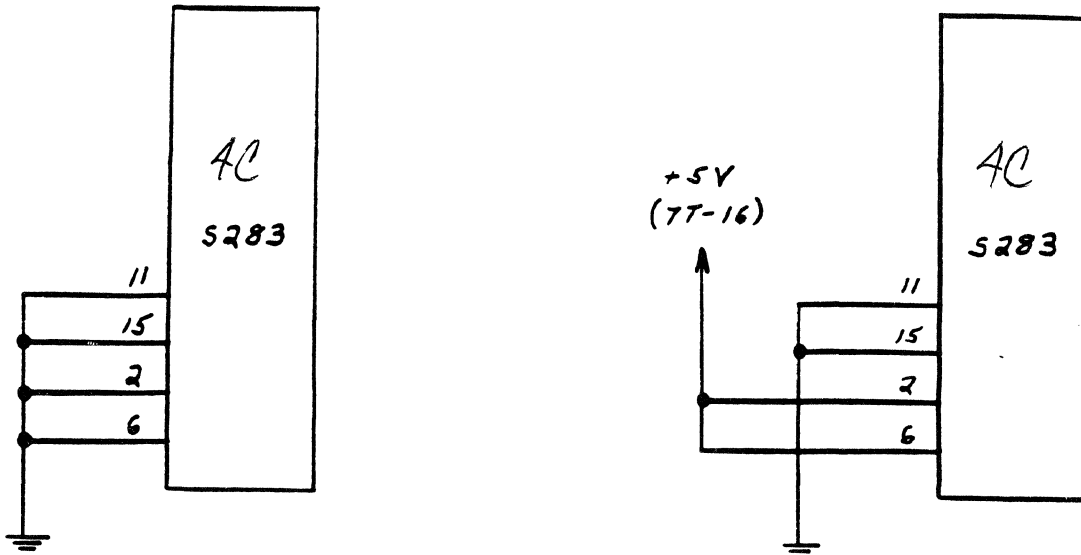


FIGURE 1

AMPEX | Ampex Corporation
REDWOOD CITY, CALIFORNIA

LIST OF MATERIALS

F.E.B. 61108 - BK-8606-08

PRINTED WIRING ASSEMBLY
COEFFICIENT STORE

LIST OF MATERIALS NUMBER

1420026

REVISION J

ITEM NO	PART NUMBER	DESCRIPTION	REF DESIGN		QTY REQD PER DASH NUMBER															
			02	03																
1	1420027	PRINTED WIRING BOARD																		
2																				
3	1420028	SCHEMATIC			L	H														
4																				
5	1409670-AY	LABEL, EXTRACTOR ARM, PWA			1	1														
6	1409976-AA	INSULATOR, STIFFENER			1	1														
7	1409976-AB	INSULATOR, STIFFENER			1	1														
8	1409997-AA	STIFFENER, PWB			1	1														
9	1409997-AB	STIFFENER, PWB			1	1														
10	1420270-01	PROM ASSY REF: 87S181	7E		1	1														
11	1420271-01		7G		1	1														
12	1420272-01		7H		1	1														
13	1420273-01		7K		1	1														
14	1420274-01		7L		1	1														
15	1420275-01		7N		1	1														
16	1420276-01		7P		1	1														
17	1420277-01	PROM ASSY REF: 87S181	7S		1	1														
18																				
19	000-007	INTEGRATED CIRCUIT, 25S10	2J,K,L,M,N,P,R,S,3J,K,L, M,N,P,R,S,4J,K,L,M,N,P, R,S,5J,K,L,M,N,P,R,S		32	32														
20	001-086	74H87	5B,6C		2	2														
21	589-837	74S00	5E		1	1														
22	589-838	74S04	2F,4H		2	2														
23	000-152	10125	2D		1	1														
24	589-847	74S86	6A		1	1														
25	589-823	74LS138	1E,2E		2	2														
26	590-853	74S139	5G		1	1														
27	590-845	74S32	6B		1	1														
28	590-622	74LS670	3D,E,F,G,4D, E,F,G		8	8														
29	589-830	74LS174	2H		1	1														
30	589-850	74S163	5D,5F		2	2														
31	590-855	74S374	1A,B,C,D,F,G,J,K,L,M,N, P,R,S,2G,3A,B,5A,C,H,6J, K,L,M,N,P,R,S		28	28														
32	590-586	74LS374	1H		1	1														
33	000-128	74S283	2A,B,C,4A,B,C		6	6														
34	590-868	INTEGRATED CIRCUIT, 74S244	6H		1	1														
35																				

LM-1420026

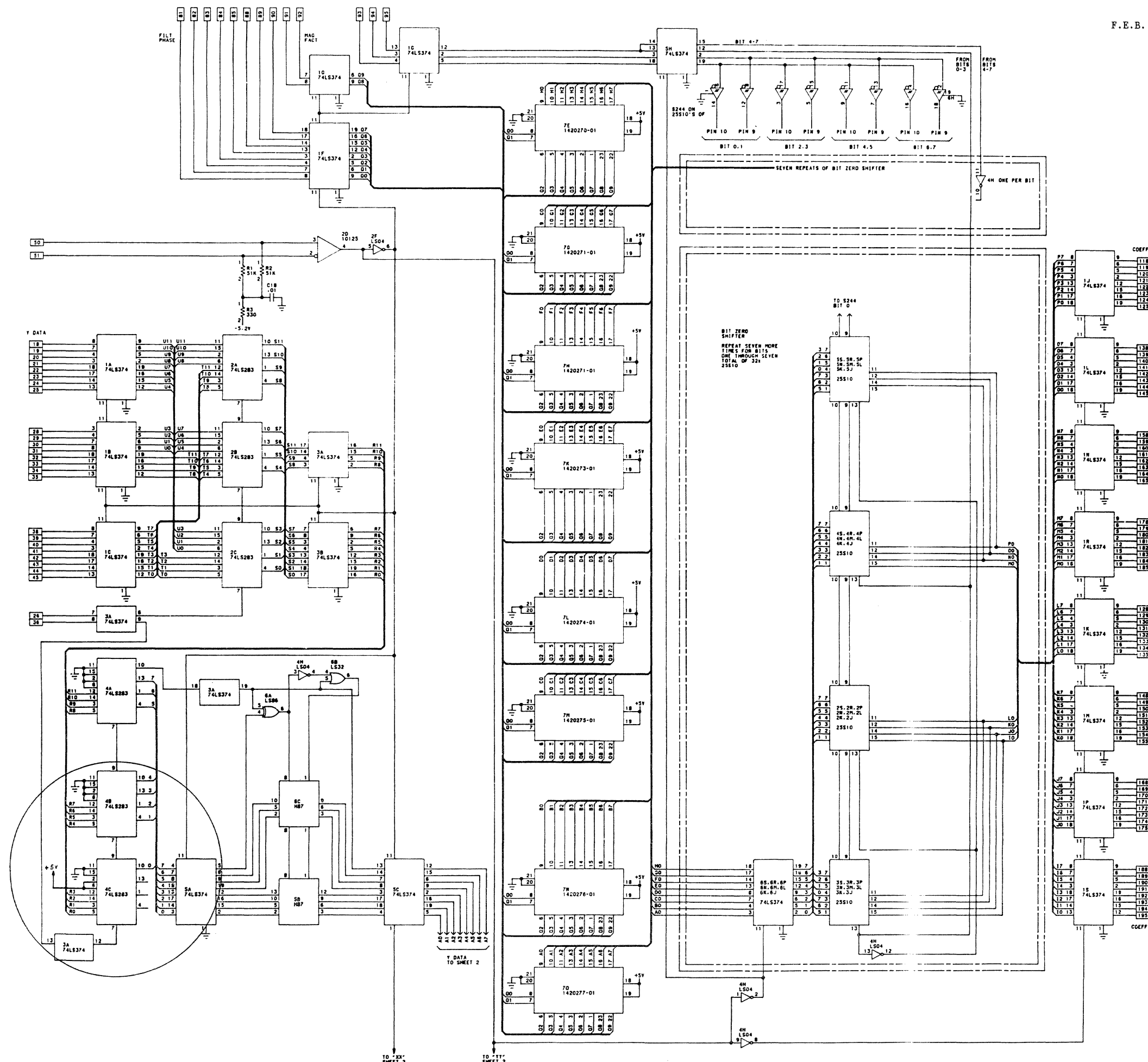
ITEM NO	PART NUMBER	DESCRIPTION	REF. QUANT.	QTY. REQ. PER DA/J# NUMBER	
36	066-811	RESISTOR, C.F., 51 OHMS, 1/4W, 5%	R1,2	2	
37	066-838	RESISTOR, C.F., 330 OHMS, 1/4W, 5%	R3	1	
38					
39	037-965	CAPACITOR, TANT., 120uF, 10V, ±20%	C8,32	2	2
40	064-652	CAPACITOR, CER., MONO., .01uF, 50V, ±20%	C18	1	1
41	064-653	CAPACITOR, CER., MONO., .1uF, 50V, ±20%	C1-7,9-17,19-31,33-65	62	62
42					
43					
44	582-333	I.C., MTG HDW., SOCKET, 20 PIN	REF: 1A,B,C,D,F,G,H,I,J,K,L,M,N,P,R,S,2G,3A,B,5A,C,H,6H,J,K,L,M,N,P,R,S	30	30
45	582-330	14 PIN	REF: 2F,4H,5B,E,6A,B,C	7	7
46	582-280	24 PIN	REF: 7E,G,H,K,L,N,P,S	8	8
47	582-331	I.C., MTG HDW., SOCKET, 16 PIN	REF: 1E,2A,B,C,D,E,H,J,K,L,M,N,P,R,S,3D,E,F,G,J,K,L,M,N,P,R,S,4A,B,C,D,E,F,G,J,K,L,M,N,P,R,S,5D,F,G,J,K,L,M,N,P,R,S	53	53
48					
49					
50	471-060	SCREW, PAN HD., X-REC, 4-40 X .250 LG		6	6
51	493-005	NUT, HEX, NYLON LOCK, 4-40		6	6
52	530-477	ENCLOSURE PART, CARD INSERTER/EXTRACTOR		2	2

NOTES: STATIC SENSITIVE DEVICE, SPECIAL HANDLING
REQUIRED PER AMPEX STD HE1-1.

LM-1420026

AMPEX





SCHEMATIC DIAGRAM
 DSE COEFFICIENT STORE
 1420028
 REVISION M
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